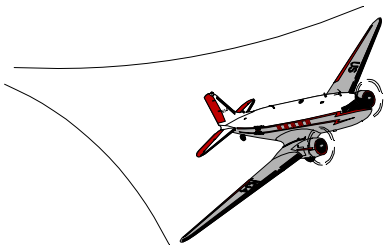
SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department of Transportation

Federal Aviation Administration

Aircraft Certification Service
Washington, DC

No. NE-02-30
June 3, 2002

We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts owners, operators, and repair facilities of Pratt & Whitney (PW) JT9D series turbofan engines and Principal Maintenance Inspectors in FAA's FSDOsof the importance of performing an enhanced inspection of the cooling holes on LPT 4th and 5th stage rotating airseals. This SAIB also advises you to scrap certain disks that have service time with airseals with blocked cooling holes. An uncontained engine failure can potentially occur if the rotating airseal cooling holes are blocked.

Affected Products

Pratt & Whitney **JT9D -7Q, -7Q3, -59A, -70A**

Background

Investigation of an uncontained failure of a JT9D-7Q 5th stage low-pressure turbine (LPT) disk revealed the LPT 5th stage airseals were improperly repaired with excessive plasma spray which blocked the cooling hole on the airseal. Blocking of the cooling flow results in unacceptable high temperatures on the disk which can cause the disk to crack and ultimately separate. The FAA issued *SAIB NE-02-21 dated 03/15/02,* to recommend the inspection of the 5th stage LPT airseal cooling holes. Further investigation by Pratt & Whitney indicated blocking of the cooling holes on the LPT airseals of 4th or 5th stage disks would significantly reduce the lives of the LPT disks. Those disks, which have service time with airseals that have blocked cooling holes, should be scrapped in accordance with instructions described in JT9D Engine Manuals 777210 and 754459.

Recommendations

The FAA Engine Certification Office advises owner/operators/repair facilities to continue to inspect the incoming part and post-repaired part of the 4th and 5th stage LPT airseals. We also advise that if a 4th or 5th stage LPT airseal has service time with more blocked holes than are permitted, you should scrap the airseal, disk and blades associated with the airseal, as described in the P & W JT9D Engine Manuals 777210 and 754459.

For Further Information, Contact

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